BOROUGH OF NEWCASTLE-UNDER-LYME.

ANNUAL REPORT

ON THE

HEALTH OF THE BOROUGH

FOR THE YEAR 1914,

BY

JOHN FORTUNE, M.D., D.P.H.,

ETC.,

Medical Officer of Health, School Medical Officer and Medical
Superintendent of the Isolation Hospital.

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April, 1915.

Gentlemen,

I have the honour to present to you the Annual Report on the Health of the Borough for the year 1914.

I desire to express my thanks to the Members of the Health Committee for the support they have accorded me.

I wish, also, to record my appreciation of the support of the Members of the Staff.

I am, Gentlemen,

Your obedient Servant,

JOHN FORTUNE.

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Summary of the Vital Statistics for 1914.

Population of Borough estimated to middle of 1914	20,301
Area of Borough in acres	671
Density of population : persons per acre	30
Births—Number 557 ; rate per 1,000 living	27·4
Deaths—Number 385 ; rate per 1,000 living	18·9
Deaths of Infants under 1 year of age	105
Infantile death rate per 1,000 births	18·8
Zymotic death rate per 1,000 living	2·8
Phthisis death rate per 1,000 living	1·3
Cancer death rate per 1,000 living	·9
Respiratory death rate per 1,000 living	3·9

SECTION A.—Natural and Social conditions of the District.

Newcastle is principally a residential town for all classes of the community. It is situate on both sides of a valley, the soil being mainly clay on the east side, and red sandstone on the west. There is therefore a considerable amount of water in the subsoil.

The chief industries in the Borough are: a large Clothing Factory, a Bone Works, a Paper Mill, and seven Fustian Cutting Mills.

The larger proportion of artisans are however, employed outside the Borough in the Coal, Iron, Tile and Pottery Industries.

The census return for 1911 showed the population of the Borough to be 20,201. 1901 the population was 19,914, so that the increase in 10 years was only 287.

The natural increase of population in that time, that is the excess of births over deaths, amounted to 2,521, so that instead of an annual increase of population of 250, there is only 28 as evidenced by the census returns. This difference can only be accounted for by emigration from the district.

The estimated population for 1914 is 20,301.

It is noticeable that in Newcastle the employment of women is in greater demand than that of men. The tendency, therefore, is for the young men to leave the Borough, leaving the old people with the younger children. Even though the improvement in the fustian and clothing trade may have been the means of keeping girls and young women in work in the Borough, these on marriage naturally move to where their husbands are employed.

The area of the Borough is small, and only by means of maintaining an adequate number of artisans' houses can the prosperity of the Borough be maintained and the existing tendency to emigration of the youthful population be corrected.

This has been recognised by the Council, whose building scheme on the Lower Green is a step in the right direction. These houses not only will supply a felt want, but are a decided improvement to the locality. This is important in a sense in that the Borough is a residential town foremost, and that its situation lends it further scope in this respect.

The many improvements made by the Highways Committee have decidely increased its amenities, and during 1914, the appearance of the streets by the Brunswick bridge improvement and by the plantation of trees on several of the thoroughfares.

Wide streets are an asset to a town in more than one direction, and with more than an indirect bearing on the public health.

The increased amount of sunlight and ventilation is of decided advantage to the inhabitants, and the improved conditions foster a sense of civic pride which may be carried to the homes. There is always a certain amount of slovenliness and carelessness involved in the degeneration of a street to a slum area, and a sense of civic pride acts as a corrective to this.

The provision of a wide foot-path lined with trees effects considerable improvement in the appearance of any street, and is an advantage to the town and to the citizens.

Newcastle is provided with numerous spaces of unbuilt on land, the allotments of the Burgesses, and consequently is not closely built up. These help considerably to keep down the proportion of houses per acre and act as "lungs." In the comparatively closely built area beside the Upper and Lower Green there still remain the wide footpaths, which give an increased breadth to the streets, and which offer great scope for improvement in appearance should the policy of boulevarding be extended.

SECTION B.—Sanitary Circumstances of the District.

Water Supply.—Only 1 house remains which obtains the water supply from a well. This is a deep well supply. The remainder of the Borough obtains its supply from the Staffs. Potteries Water Co. This is a satisfactory supply on the constant system.

Stream Pollution.—No instance occurred during the year.

Drainage and Sewerage.—Provision for this is adequate and satisfactory.

There is a total of about 18 miles of sewer in the Borough. The work of connecting up house drains with proper sewers is pursued wherever the discharge into blind pipes is discovered. With regard to house drainage 58 houses have been re-drained, and 26 partially re-drained. All new drains are subjected to the water-test. Sewage disposal is efficiently dealt with by the sewage works, and without offensive smell. The methods adopted are quite effectual and adapted to the needs of the town.

Premises and Occupations Controlled by Bye-Laws.—There are two fell-mongers in the Borough, and part of the bone-works falls within the boundary. The common lodging-houses are under the supervision and inspection of the police. There are 14 common lodging-houses on the register, providing accommodation for 278 beds.

There are no " Houses let in Lodgings " in the Borough.

With regard to the Common Lodging Houses, the Chief Constable informs me that these houses have been frequently visited at irregular intervals. In several instances cautions have been administered.

Schools.—The sanitary conditions of the schools in th area are now entirely satisfactory. There was a considerable amount of Infectious Disease among school children during the year. Under the " Memorandum on Closure and exclusion from School " suspected cases were notified by teachers to the Medical Officer as follows:

Whooping Cough	48
Chicken Pox	10
Measles	124
Mumps	6
Total	188

These were visited and action taken accordingly.

Apart from these cases individual exclusion on account of infectious disease was carried out at the school clinic in the following instances :—

Rubella (German Measles)... ...	2
Diphtheria	25
Diphtheria Contacts (positive) ...	9
Measles	4
Whooping Cough	34
Chicken Pox	15
Mumps	93
Cervical Adenitis (infectious) ...	24
Total	206

With regard to Measles it was found necessary to close the Infants Departments of 4 of the Schools, as follows :

Hassell Street Infants March 31st to 9th April, inclusive.
National Infants April 6th to 9th April, inclusive.

After the Easter Vacation it was found necessary to extend the closure as follows :

Hassell Street Infants extension 21st April to 1st May inclusive.
National Infants extension 21st April to 1st May inclusive.
Roman Catholic Infants 21st April to 8th May inclusive.
Rye Croft Infants 22nd April to 8th May inclusive.

It was found unnecessary to recommend closure of the remaining school, Friarswood, which is situated at some distance from the other schools, being the only school in the West Ward of the Borough.

In the upper standards children from houses where a case occurred were excluded only if they had not themselves had Measles. This procedure was also applied in cases of Chicken Pox and Whooping Cough. In the case of Mumps only the affected child was excluded. The procedure as regards Diphtheria cases includes the swabbing of all contacts. This question is dealt with later under the subject of Diphtheria. The features of the Infectious Adenitis are also referred to later in this Report, and further references will be found in the Report on School Medical Inspection.

FOOD.

Milk.—The milk supply of the town may be regarded as satisfactory. The bulk of the milk sold comes in from farms in the country, and outside the area. There are 3 dairies in the Borough where the dairy-keeper is also a cow-keeper. There are 49 purveyors of milk on the register. The condition of the milkshops and cowsheds is satisfactory.

30 visits were made to dairies and milkshops and 42 to cowsheds.

An outbreak of gastro-enteritis due to milk occurred, and a special report has been presented to you on the subject The outbreak, which affected 281 persons, was due to a bacillus enteriditis, and was traced to a cow which had been ill and remained a 'carrier' of the bacillus, and capable of infecting the milk.

Other Foods.—33 visits of inspection were made to bakehouses. There are 19 bakehouses on the register, all of which are clean. There are no underground bakehouses.

Meat.—There is no public abattoir in the Borough, but there are 15 private slaughter-houses, 4 being licensed and 11 registered.

416 visits of inspection were made during the year, visits being made at the time of slaughtering as well as at irregular hours.

During the year there were condemned and destroyed :—

1 Hind quarter
1 Fore quarter
6 Pigs
6 Heads (beasts)
5 Hearts ,,
9 Lungs ,,
3 Spleens ,,
8 Livers
7 Bellies
1 Udder
318 lbs. of Fat

All the above were tuberculous.

There were also condemned :—

112 lbs. Finnon Haddock
896 lbs. Strawberries
4 Turkeys

SALE OF FOOD & DRUGS ACT.

61 samples were taken, 28 of these being formal, and 33 informal.

Milk ...	30	Cream of Tarta ...	1
Butter ...	11	Camphorated Oil ...	4
Preserved Cream	4	Licorice Powder ...	2
Lard ...	9		

Legal proceedings were taken, and convictions obtained in the case of 3 samples of milk, one of which was deficient in cream, one having added water, and one containing 6.3 grains of boric acid per gallon. A fine and costs were imposed in every case.

MILK & CREAM REGULATIONS (1912.)

1. Milk ; and Cream not sold as Preserved Cream.

	(*a*) Number of samples examined for the presence of a preservative.	(*b*) Number in which a preservative was reported to be present.
Milk	30	1
Cream	0	0

2. Cream Sold as Preserved Cream.

(*a*) Instances in which samples have been submitted for analysis to ascertain if the statements on the label as to preservatives were correct.

Correct statements made	4
Statements incorrect	0
Total	4

(*b*) Determinations made of milk fat in cream sold as preserved cream.

Above 35 per cent.	4
Below 35 per cent.	0
Total	4

(*c*) Instances where (apart from analysis) the requirements as to labelling or declaration of preserved cream in Article V. (1) and the proviso in Article V. (2) of the Regulations have not been observed, 0.

(*d*) Particulars of each case in which the Regulations have not been complied with, and action taken, 0.

3. Thickening Substances.—Any evidence of their addition to cream or preserved cream. Action taken where found, 0.

4. Other Observations, if any.—Cream cannot be bought in this area unless previously ordered.

HOUSING.

Number of dwelling houses inspected	322
,, ,, dwelling houses unfit for habitation ...	0
Representations to Local Authority with a view to closing orders	0
Closing orders made...	0

The following 2 houses have been demolished: 74 and 76 Lower Green.

Owing to the shortage of housing accommodation for the working classes, there has been allowed a certain latitude in housing conditions, pending the erection of the cottages by the Corporation. There are many houses requiring alteration before they can be considered sanitary, and these will be dealt with in due course.

3 cases of overcrowding were discovered and 2 were dealt with. Under the Housing and Town Planning Act no notices were served. During recent years large improvements have been effected in housing conditions by the Corporation, and the town itself has been much improved by the demolition of closely grouped insanitary property.

The provision of housing accommodation for the working classes has been tackled by the Council, and the Corporation Cottages being erected on the Lower Green are nearing completion. The houses are 29 in number and are of 2 kinds, 13 houses consisting of 2 rooms and a kitchen, and 16 houses having an additional bedroom. There is good yard space, and as there are 2 wide entries, there is allowed free room for air movement round the honses, thus avoiding a decided drawback where houses are built in long blocks with unbroken frontage. The houses will supply a felt want, and form a decided improvement to the locality.

During 1914, 4 houses for the working classes were built, and on 31st December, 29 were in course of erection.

The Bye-Laws are amply sufficient in supervising the nature of new dwellings proposed.

Many of the houses in the Borough are of an old date of construction and defects such as bad window construction are constantly being dealt with. As in by far the majority of these cases however, the door from the street opens directly into the room and not into a passage, the evil effects are greatly minimised.

The paving of back yards and passages is carefully attended to.

With regard to the new cottages erected by the Corporation, it is proposed to charge the following Rents :—

1 house at 4/6 weekly, inclusive of Rates
11 houses at 4/9 ,, ,, ,,
16 houses at 5/6 ,, ,, ,,
1 house at 5/3 ,, ,, ,,

Closet Accommodation.—During the year 67 privies and 1 pail closet have been converted into water closets. This work is of the greatest import from the sanitary point of view. As regards disposal of excreta, it is the prime object to have these removed from the vicinity of the dwelling houses with as much expedition as possible, and this can be done efficiently only by the water carriage system.

At the end of 1914 there were existing :—

Privies with fixed receptacles	84
,, ,, movable receptacles ...	22
Fresh water closets	3954
Waste water closets	56

Total number of privies and pail closets converted during 1914, 68. 2 waste water closets were also converted.

Scavenging.—The need for expeditious removal of refuse and garbage from the vicinity is as great as in the case of excreta.

All bins are emptied once weekly, and oftner when required. In 1914 there were 2900 dust-bins in use—an increase of 400 on the previous year. The collection and disposal of household and trade refuse, and of nightsoil costs 3/- per load. About 650 loads of refuse were burnt at the distructor.

Workshops and Workplaces.—20 visits of inspection were made to factories, and 127 to workshops and workplaces.

There are 143 workshops on the register, 12 of these being workshop bakehouses.

The following table shows the administration of the Factories and Workshops Act :—

I.—INSPECTION OF FACTORIES, WORKSHOPS AND WORKPLACES.

Premises.	Number of Inspections	Number of Written Notices	Number of Prosecutions
Factories (including Factory Laundries) ...	20	1	
Workshops (including Workshop Laundries)...	127	9	
Workplaces (other than Outworkers)	Nil	Nil	
Total	147	10	Nil.

II.—DEFECTS FOUND IN FACTORIES, WORKSHOPS AND WORKPLACES.

Particulars.	Nature of Work. Found	Remied.	Ref.	Prosec
Want of Cleanliness	4	4		
Want of Ventilation	3	3		
Other Nuisances	2	2		
Sanitary Accommodation insufficient				
Sanitary Accommodation unsuitable or defective ...	1	1		
Total	10	10	Nil.	Nil.

III.—HOMEWORK—OUTWORKERS' LISTS.

	Lists received from Employers sending once in the year.	
	Lists	Contractors
Wearing Apparel—making, &c. ...	1	21

IV.—REGISTERED WORKSHOPS.

Workshops	131
,, Bakehouses	12
Total ...	143

V.—OTHER MATTERS.

Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshops Acts	Notified by H.M. Inspector ...	4
	Reports (of action taken) sent to H.M. Inspector	3

Canal Boats.—Newcastle is not a registration centre for canal boats, but 1 was inspected during the year. There was no case of infectious disease on board any boat.

Sanitary Inspection.—In accordance with Article XX. of the Sanitary Officers Order, 1910, I have received the report of the Inspector of Nuisances, with regard to the work of inspection during the year. This work is excellently carried out and a large amount of supervisory work is also thrown on Mr. Holden.

Much has been referred to already, under the different heads. Attention may be drawn to—

1. The progressive substitution of water closets for privies.
2. The further introduction of ash-bins.
3. House-Inspection.

SECTION C.—Sanitary Administration.

STAFF.—There has been no change in the Staff during the year. Much extra work has devolved on the Matron of the Isolation Hospital owing to the increase in the number of cases, and the admission of extra cases from the Bradwell Hospital. This necessitated an increase in the temporary Staff of Nurses.

The hospital porter and disinfector was absent in the latter part of the year, having joined his Majesty's Army.

ISOLATION HOSPITAL.—This is a joint hospital, serving the areas of the Newcastle Urban and Rural districts.

There are 42 beds available, and Scarlatina, Diphtheria, and Enteric Fever may be treated at the same time.

In 1914, 140 cases were under treatment, consisting of Scarlet Fever and Diphtheria cases.

The summary of cases treated is as follows, the cases being classified according to the provincial diagnosis of notification on admission :

	Scarlet Fever	Diphtheria	Total
Remaining 1st January, 1914	1	5	6
Admitted	43	91	134
Discharged	23	89	112
Died	0	3	3
Remaining 31st Dec. 1914...	21	4	25

Of the 134 cases admitted, 90 were from the borough, 14 from the Rural district and 30 were from outside the area. These latter consisted of cases unable to be taken in at the Bradwell Hospital.

Of the total 140 under treatment during the year, 40 were cases of Scarlet Fever, 2 suspected Scarlet Fever, 3 mixed cases of Scarlet Fever and Diphtheria, 86 Diphtheria and 9 were infectious Diphtheria contacts.

The distribution of the cases was :

Diphtheria—74 cases from the Borough of Newcastle
10 from the Rural district
2 from Bradwell.

Scarlet and Diphtheria—1 from the Borough
2 from Bradwell.

Scarlet Fever—6 from the Borough of Newcastle
8 from the Rural district
26 from Bradwell.

Thus 18 cases were under treatment belonging to the Rural district, 30 belonging to Bradwell, and the remainder to the borough.

There were 3 deaths from diphtheria during the year, this being a mortality of less than 3 per cent. of the cases treated.

The operation of tracheotomy was performed once during the year.

Of the 25 cases remaining in hospital on 31st December, 9 belonged to the borough, the cases being :

	Scarlet Fever	Diphtheria	Mixed	Total
Borough	5	3	1	9
Rural District	4	0	0	4
Bradwell	11	1	0	12
	20	4	1	25

The hospital was closed for one period of 14 days only during the whole of the year, owing to absence of cases. The accommodation is quite ample for the needs of the district, a permanent staff being maintained to deal with Scarlet and Diphtheria cases, and additional nurses being engaged when necessary.

The large number of cases of Diphtheria in the district kept the Diphtheria Ward engaged, and in a small hospital like this, the difficulties of administration are immensely increased by the occurrence of two varieties of infectious disease at the same time. For instance, while the staff may be occupied with several cases of Diphtheria, the admission of a single case of Scarlet Fever means the opening of another Ward, and usually the addition of temporary assistance.

I must express my thanks to Mrs. Holden, the Matron, and to Mr. Holden for their valued co-operation.

Two cases from outside the Borough developed Chicken Pox in the hospital, but within the incubation period. Prompt isolation prevented the occurrence of any other cases.

A SUMMARY of the work done in the Inspector's Department is given in Table V.

		Number of		Abatement Notices		Nuisances Abated after Notice by	
		Inspections and Observations made	Defects found	Inform'l by Inspector	Formal by Authority	Inspector	Authority
Dwelling houses & Schools	Foul Conditions	95	44	44	...	41	...
	Structural Defects	195	96	96	...	64	...
	Overcrowding	...	3	3	...	2	...
	Unfit for Habitation ...	...	...	...	...	...	...
	Dairies and Milkshops ...	30	...	..	...	...	...
	Cowsheds	42	4	4	...	4	...
	Bakehouses	33	2	2	...	2	...
	Slaughterhouses	416	6	6	...	6	...
	Canal Boats	1	...	...	...	...	...
	Ashpits and Privies... ...	810	584	584	5	584	5
	Deposits of Refuse & Manure	19	10	10	...	10	...
	Water Closets	29	15	15	...	20	...
House Drainage	Defective Traps	...	...	...	...	...	...
	No Disconnection	...	...	...	...	...	...
	Other Faults	24	12	12	...	13	...
	Animals improperly kept ...	4	2	2	...	1	...
	Offensive Trades	35	3	3	...	3	...
	Smoke Nuisances	6	...	...	...	...	...
	Other Nuisances	190	93	93	...	67	...
	Sinks provided	69	23	23	...	27	...
	Total	2006	897	897	5	844	5

Unwholesome Food	Number of Seizures	19
	Condemned by Magistrates	2
	Prosecutions for exposing for sale	0
	Convictions " "	0
Food and Drugs Act	Samples taken for Analysis	61
	Number found adulterated, &c.	3
	Proceedings taken	3
	Number of Convictions	3

PRECAUTIONS AGAINST INFECTIOUS DISEASE.

Lots of Infected Bedding disinfected or destroyed	131
Houses Disinfected after Infectious Disease	131
Schools " " "	2

Cases of Infectious Disease notified during year 1914.

NOTIFIABLE DISEASE.	NUMBER OF CASES NOTIFIED.								Total Cases Notified in each Locality.		Total Cases Removed to Hospital.
	At all Ages	At Ages.—Years.									
		Under 1	1 and under 5	5 and under 15	15 and under 25	25 and under 45	45 and under 65	65 and upwards	East Ward	West Ward	
Diphtheria (including Mem. Croup)	86	2	8	59	9	7	1	0	38	48	75
Erysipelas	13	0	0	1	2	6	3	1	9	4	0
Scarlet Fever	12	0	2	9	0	1	0	0	9	3	6
Enteric Fever...	7	0	0	0	2	5	0	0	2	5	2
Puerperal Fever	1	0	0	0	0	1	0	0	1	0	0
Ophthalmia Neonatorum	2	2	0	0	0	0	0	0	1	1	0
Pulmonary Tuberculosis	94	0	0	32	15	36	11	0	38	56	0
Other forms of Tuberculosis ...	8	1	0	6	1	0	0	0	6	2	0
Totals	223	5	10	104	29	59	15	1	107	116	83

Newcastle Isolation Hospital—within the Borough--jointly maintained with the Rural District.

In reply to the request of the War Office, six beds were reserved for possible cases of Enteric Fever.

List of adopted Acts in force in the Borough:

Infectious Diseases Notification Act, 1889
Infectious Diseases Prevention Act, 1890
Public Health Amendment Act (Parts 2, 3, 4 & 5) 1890
Notification of Births Act, 1907
Public Health Amendment Act (Section 86 of part 7) 1907.

CHEMICAL AND BACTERIOLOGICAL WORK.—In addition to the various samples sent to the analyst under the Food and Drugs Act and the Milk and Cream Regulations, milk was sent on various occasions for bacteriological examination, once for tubercle bacilli and several samples in connection with outbreak of diarrhœa.

No tubercle bacilli were found in the milk nor were pathogenic organisms detected on the other occasions.

Apart from the numerous samples of milk, blood, and other material sent for bacteriological investigation in connection with the Milk Outbreak of Enteritis (referred to later in this report) which occurred in October, a considerable amount of bacteriological work was sent to Birmingham University in the regular way for the purpose of diagnosis of Diphtheria, Enteric, and Tuberculosis. Most of this work was carried out in attempting the dilineation of the extent and source of the Diphtheria which was so prevalent in the early part of the year. A large number of contacts were thus examined. The arrangement between the County Council and the University of Birmingham allows of the prompt confirmation or otherwise of diagnosis, and during the year use was made of these arrangements as follows:

		Specimens sent.
Enteric Fever	Widal Examination ...	17
Tuberculosis	Sputum	39
Diphtheria...	Throat Swabs	310
Diphtheria Contacts ...	Throat Swabs	146
Outside Cases in Newcastle Hospital	Throat Swabs	31
	Total Specimens sent from Newcastle ...	543

SECTION D.—Prevalence of and Control over Acute Infectious Diseases.

In recent years Newcastle, in spite of its geographical position, has been fortunate in its freedom from the presence of serious epidemics. During 1914 however, while the numbers of Scarlet Fever and Enteric Fever cases have remained low, there occurred a large increase in the number of Diphtheria cases. In addition Newcastle was visited by several of the non-notifiable acute infectious diseases, and Measles, Whooping Cough, and Mumps were common amongst school children.

The following Table shows the notifications since 1901:

YEAR	Scarlet Fever	Diphtheria	Erysipelas	Enteric	Continued	Puerperal Fever	Small Pox	Ophthalmia	Poliomyelitis	TOTALS
1901	28	14	13	8	...	1	...	...	...	64
1902	28	6	17	18	...	6	...	...	...	75
1903	23	4	12	26	...	1	4	...	...	70
1904	212	5	18	10	...	1	8	...	...	254
1905	138	11	11	33	...	2	...	...	...	195
1906	80	13	20	21	...	2	...	...	...	136
1907	38	9	11	5	...	...	...	...	...	63
1908	11	6	9	9	...	...	...	...	...	35
1909	59	12	11	7	...	1	...	4	...	94
1910	49	9	9	14	...	1	...	10	...	92
1911	55	16	11	16	...	1	...	6	...	105
1912	14	7	5	3	...	...	...	2	1	32
1913	16	32	8	6	...	...	...	5	1	68
1914	12	86	13	7	...	1	...	2	...	121

Scarlet Fever.—12 cases were notified during the year, six of which were removed to hospital. 11 of the cases occurred in the last quarter of the year, the town being free for six months.

Diphtheria.—86 cases were notified, and 73 cases were removed to hospital. Two cases ended fatally.

In a borough like Newcastle, where the disease is not endemic, it is often possible to trace the source of introduction of an infectious disease, and in the case of Diphtheria, which is spread nearly always by persons and rarely by infected media, the spread can to a large extent be controlled by taking swabs of contacts.

This disease is spread through the community most readily by means of the various agencies which tend to bring together large numbers of susceptibles, or in other words wherever crowds gather in close association.

Schools furnish the best example of this, though Churches, Sunday Schools, Picture Houses are other examples. As a rule schools are attended by children in the locality, so that if a case is imported, one assumes the infection has been caught elsewhere, whereas Theatres or Picture Houses are often attended by people from localities near.

In investigating an outbreak one repeatedly finds cases, which, with a history of little or no recent throat trouble, are harbouring Diphtheria Germs, and being free to move about, are capable of infecting others with Diphtheria and so spreading the disease broadcast. Should one of these "carriers" be a child at school, his opportunity for mischief is great, but the mischief is easily spread over a wide area if he attend a place to which people congregate from different localities. Thus one is not surprised to find that the source is traced to the out- patient department of a large hospital, and where the hospital serves the needs of a large district it would be strange if infectives were not spread in this way.

In the early part of the year owing to the increased notifications, I made a careful inquity into the history of the cases with the following results.

There were no notifications for an interval of 31 days between the 24th December, 1913 and the 20th of January, 1914. Thus there was no case in the borough to infect another, and the disease presumably must start again with an imported infection.

The notifications for December, 1913 amounted to 7, 2 being cases which developed while in the North Staffordshire Infirmary, and 1 being the daughter of a charwoman employed at that Institution.

The cases then occurred as follows :—

Date	Cases	History
January	2	1 been attending the N.S. Infirmary
February	5	

Of these 5, 2 were children who attended Rye Croft School, and whose sister had been a patient recently at the North Stafford

Infirmary. I took swabs of this and the other members of the family and found Diphtheria Bacilli were obtained in each instance. These positive cases were isolated.

At this point the fact was established that infection had been introduced to the Ryecroft School.

The weekly notifications then ran :

Week ending	7th March,	4 cases,	2 attending Rye Croft School
,, ,,	14th ,,	3 ,,	3 ,, ,, ,,
,, ,,	21st ,,	6 ,,	4 ,, ,, ,,
,, ,,	28th ,,	2 ,,	1 attending Rye Croft and 1 attending the Infirmary
,, ,,	4th April,	7 ,,	3 attending Rye Croft School
,, ,,	11th ,,	8 ,,	4 ,, ,, ,,
,, ,,	18th ,,	2 ,,	1 ,, ,, ,,
,, ,,	25th ,,	3 ,,	1 ,, ,, ,,
,, ,,	2nd May,	2 ,,	0 ,, ,, ,,
,, ,,	9th ,,	3 ,,	0
,, ,,	16th ,,	0	

No other case occurred in the Borough until June 25th, and this meant a new infection and a fresh start. For 5 months there was no case in a child attending Rye Croft School, between the 21st April and 21st October, showing that the school as a medium for spread had been completely freed. The outbreak had been stamped out.

Of the 47 cases dealt with above, 21 were of children attending Rye Croft School, and further history traced the infection in several separate instances to the N. S. Infirmary. After the notification of 20th February, I instituted the taking of swabs of other children attending the school either

(*a*) reported as having sore throat, or as having been absent recently with sore throat,

(*b*) children in close association with those who were found to have diphtheria.

Thus 105 swabs of school children were taken, and 13 cases of sore throat or recent sore throat were found to be diphtheritic. Of these, three were children living outside the Borough. All those cases were excluded, and the class rooms were thoroughly disinfected.

Apart from the cases in school children, household contacts were also investigated bacteriogically, and 9 infectious cases, not showing sore throat, were isolated until their throat swabs were free.

The procedure adopted was apparently successful, and proved that the disease was being disseminated mainly by carriers.

291 swabs were taken of throats during the small outbreak, and special visits were made to the schools, and all school children complaining of throat trouble were sent to the clinic and swabbed. In this way the spread was more or less under control, whereas school closure would probably have led to dissemination with no means of control, and investigation of the source of spread would have been full of difficulty.

The next cases in the Borough were traced to a case of sore throat at Wolstanton, which eventually proved to be diphtheritic. In 3 cases the infection was traced to this patient. Succeeding cases were not so easy to trace and had no common source of infection.

As however, 59 of the cases notified in the year out of 86 were of ages between 5 and 15 years, it is obvious that school children formed the most susceptible group of the population. For this reason all children with suspicious sore throat were swabbed at the office, and the children excluded until the result was known.

In this way 25 cases of sore throat were found to be diphtheria cases, and the contacts were also excluded until the swabs were negative. Thus a total of 146 contact swabs were sent in the year for examination, and 9 of these were positive cases in school children with no history whatever of sore throat.

Though it is impossible to prevent the introduction of disease to this district, it is possible to control the spread very effectively as far as the school population is concerned, and where the disease is being spread through attending school, it can be effectually stamped out.

Erysipelas.—13 cases were notified during the year. None was removed to hospital.

Enteric Fever.—7 cases were notified. 4 of these occurred in the Union Infirmary, and though Dr. Webster, the Medical Officer has made thorough search for a possible carrier, the source was undiscovered. Of the other cases 2 were removed for treatment to the North Staffs. Infirmary. The remaining case was fatal. During the year 17 samples of blood were sent for examination.

Apart from the Union cases, it was possible to trace the infection to a source outside the area in two of the others.

Puerperal Fever.—One case was notified. This is the only case in three years.

Ophthalmia.—2 cases were notified, and both were successfully treated under the scheme in force.

Non-Notifiable Infectious Diseases.—These have to some extent been dealt with under the heading of "Schools." Measles, Whooping cough, Chickenpox, and Mumps were prevalent, and in addition, form of infectious adenitis of the neck was comparatively common.

Measles appeared in epidemic form after being practically absent since 1911. Previously, epidemics recurred almost regularly every second year, so that on this occasion there was a larger number of susceptibles ready to contract the disease.

Adenitis.—An infectious form of Cervical Adenitis with an incubation period of 7 to 14 days was fairly common. In these cases the glands involved were mainly those behind the angle of the jaw, and to a less extent those behind the sterno-mastoid muscle in the neck. In many instances adults caught the infection, often complaining of stiff-neck and the glands behind the muscle were enlarged and tender, though not greatly enlarged. Where the gland behind the angle of the jaw was affected, the swelling was pronounced, and in these the posterior cervical glands were also affected.

Twenty-four cases were excluded at the school clinic, 13 boys and 11 girls, but there were many other cases in the Borough, and in several instances 3 or more members of a household were affected in turn.

SECTION E.—Prevalence of, and Control over Tuberculosis.

During the year 102 cases of Tuberculosis were notified, 94 being tuberculosis of the lungs and 8 other forms.

Of these 78 were notified by practitioners on Form A.
24 ,, ,, the School M.O. on Form B.

The 78 A comprised 72 Lung cases and 6 others.
The 24 B comprised 22 ,, ,, 2 others.

The 8 other forms consisted of

2 Tuberculosis of Skin.
2 ,, Bone.
3 Abdominal Tuberculosis.
1 Cerebral Tuberculosis.

The movement of patients to and from Institutions are represented by 11 Form C, and 7 Form D.

The age and sex destination of the notification is shown as follows :

Site	Sex	0-1	1-5	5-15	15-25	25-35	35-45	45-55	55-65	65 and over	Total
Lungs	Male	...	...	15	8	6	6	4	2	...	41
	F'male	...	...	17	7	9	15	4	1	...	53
	Total	...	...	32	15	15	21	8	3	...	94
Others	Male	1	...	2	1	...	...	...	...	...	4
	F'male	...	...	4	...	...	...	...	...	...	4
	Total	1	...	6	1	...	...	...	...	...	8

The cases, when notified, are visited by the nurse, and a printed card of instructions to the patient, containing directions on the precautions to be taken, is left. When necessary the houses are also visited by the Medical Officer of Health. In this way 91 visits were made on receipt of the primary notification.

287 subsequent visits were made, 201 being to the cases notified in 1914, and 86 to cases notified prior to 1914.

At these visits the names of contacts are ascertained and referred to the Practitioner or Tuberculosis Officer for the district. Where they are of school age the names are also given to the School Medical Officer and the children are examined at intervals. The School Nurse, who is also Health Visitor, is employed as a Tuberculosis Nurse under the Tuberculosis Officer, and attends the dispensary twice weekly. She also makes visits and carries out inquiries under his directions. In a Borough of this size such an arrangement is o great value, as the work of prevention and treatment is co-ordinated and a large amount of time and clerical work is saved.

Children at school who are contacts are noted and examined at regular intervals by the School Medical Officer, and doubtful cases seen at the clinic are also referred to the Tuberculosis Officer. By frequent communication and consultation the supervision and control of such cases have been made effective. Representations to the Medical Officer of Health by the Tuberculosis Officer. as to housing conditions are received and the housing conditions carefully inspected by the Medical Officer of Health and Inspector. Sanitary defects and conditions injurious to health are dealt with when found.

The aim of the attack on Tuberculosis is early detection and prevention of spread, and while health is the chief end, the effects will also be visible in ths saving of the economic losses at present felt by the families and shared by the community.

The following table shows the notifications and the deaths since 1909 :—

	1909	1910	1911	1912	1913	1914
Deaths from Tuberculosis of Lungs	21	23	22	26	21	28
Deaths from other forms ...	2	5	12	10	11	5
Total Deaths from Tuberculosis	23	28	34	36	32	33
Notifications of Lung Tuberculosis	18	20	21	50	62	94
Notification of other Tuberculosis	0	0	0	0	8	8
Total Notifications ...	18	20	21	50	70	102

Disinfection.—After every death from Tuberculosis a form is sent to the house, so that the time may be communicated, etc., and disinfection carried out. This is also sent when a patient has been removed to an institution. During 1914, 35 houses were so disinfected.

SECTION F.—Investigation of other Diseases.

An outbreak of Gastro-Enteritis occurred at the end of October, which was traced to the milk supply of one particular farm. The milk was distributed by 2 milk sellers, and in all 281 persons were affected and 2 persons died of enteritis.

The cause was eventually found by bacteriological examination to be due to a bacillus of the *enteriditis* type, and the source of infection traced to a particular cow, which was after exhaustive investigation, finally destroyed. The extent to which the Borough was affected by the epidemic is shown in the following tables :—

	Houses supplied	Consumers	Affected	Diarrhœa	Sickness	Abdominal Pains
Milk Seller A	74	364	220	211	156	201
,, ,, B	73	393	61	48	16	25

In 281 cases the ages of the children and adults were as follows :—

	Under 2 yrs.	2-5 yrs.	5-15 yrs.	15-25 yrs.	25-45 yrs.	Over 45 yrs.
Milk Seller A	3	8	13	9	17	11
,, ,, B	13	12	53	46	60	36
Total ...	16	20	66	55	77	47

Total under 15 years = 102. Total over 25 years = 124.

A full report on the outbreak has already been presented to you.

SECTION G.—Means for preventing Mortality in Childbirth and in Infancy.

With regard to the Midwives Act, the Local Sanitary Authority is not the Administrative Authority.

Under the Notification of Birth Act, 539 births were notified to the Medical Officer of Health, amounting to 96 per cent. of all births registered during the year.

During 1914 the Health Visitor paid 744 visits in connection with the work of this Act 426 were visits made after receipt of notification, and 318 were subsequent visits, 216 being made to children notified in 1914 and 102 to children notified in 1913. The visits are paid after the receipt of the notification and at intervals of 3 months. A printed card of advice is given to the mother on the feeding and upbringing of the child, and additional information and directions as to the preparation of cow's milk and infants foods is given by the Health Visitor, as well as advice on the storage of milk and its prevention from contamination.

The number of deaths under 1 year of age, and the Infantile Mortality—*i.e.*: the number of deaths per 1000 births –are given below:—

YEAR.	Deaths under 1 Year.	Mortality per 1,000 births
Average 1886—1890	154	240
,, 1891—1895	166	253
,, 1896—1900	140	213
,, 1901—1905	102	163
1906	113	170
1907	88	150
1908 ... .,	98	160
1909	84	145
1910	50	97
1911	106	179
1912	58	96
1913	64	114
1914	105	188

1914 therefore shows the highest mortality rate for the past 10 years. In making an inquiry into the deaths it is found that the average annual number of deaths for the previous five years is 72.

On calculating an annual figure for each quarter one finds that each quarter of the year shows an increase as follows :

	Infant Deaths	Annual Figures
Average for 1909—1913 ...	72	72
March Quarter, 1914 ...	27	108
June Quarter, 1914	31	128
September Quarter, 1914 ...	20	80
December Quarter, 1914 ...	27	108

The chief causes of death were :

	1907	1918	1909	1910	1911	1912	1913	1914
Measles	6	—	7	1	5	1	—	11
Whooping Cough	4	8	2	—	7	2	2	1
Diarrhœa and Enteritis	15	26	15	9	34	5	15	13
Bronchitis ...	12	10	12	3	7	5	6	8
Pneumonia ...	4	1	6	4	8	8	8	17
Congenital Malformation, Debility and Marasmus	9	18	15	14	22	19	19	25
Prematurity ...	10	15	11	8	9	8	6	16
Suffocation ...	—	—	3	—	2	—	—	3
Convulsions ...	10	3	9	7	3	3	2	5
Others	18	17	4	4	9	7	6	6
TOTALS ...	88	98	84	50	106	58	64	105

On comparing the causes of death with the various quarters of 1914, the cause of the increased mortality is found to be

A. Large increase in the deaths from pneumonia mostly in the March Quarter.

B. Increased death-rate from Measles—noticeable in the June Quarter.

C. Increased death-rate from Premature Birth—especially in the September Quarter.

The occurrence of Premature Birth may be accounted for by the outbreak of war, and the subsequent mobilisation.

INFANT DEATHS AMONGST ILLEGITIMATE CHILDREN.

These as usual are in proportion numerous. There were 8 deaths.

3	from	Prematurity.
2	,,	Enteritis.
1	,,	Measles.
1	,,	Whooping Cough.
1	,,	Broncho-pneumonia.

There were 17 illegitimate children registered in 1914.

The mortality per 1,000 births is therefore 470.

PREVENTION OF OPHTHALMIA NEONATORUM.

The securing of treatment by means of vouchers, which are redeemed by the Corporation is distinctly successful. 2 cases were notified and both treated.

WELFARE OF MOTHERS AND EXPECTANT MOTHERS.

This will receive attention in the present year when the scheme approved by the Council will be in force. Approved cases will receive a voucher on the same principle as that which has succeeded so well in Ophthalmia.

An Infant Clinic is also in course of preparation.

SECTION H.—Vital Statistics of the District.

The population estimated to the middle of the year, is as follows:—

1901	...	19,921
1902	..	19,950
1903	...	19,979
1904	...	20,008
1905	...	20,037
1906	...	20,066
1907	...	20 095
1908	...	20,124
1909	...	20,152
1910	...	20,180
1911	...	20,208
1912	...	20,236
1913	...	20,270
1914	...	20,301

At Census, 1901
Population = 19,914
Inhabited houses = 4 000
Av. No. of persons per house = 4·9

At Census, 1911
Population = 20,201
Inhabited houses = 4,146
Av. No. of persons per house = 4·8

BIRTHS.

During 1914, 559 births were registered in the Borough. The corrections by the Registrar General reduce this figure to 557 births belonging to Newcastle, being equal to a birth-rate of 27·4 per 1000 living.

These are made up of .--

	Males	Females	Total
Legitimate	294	246	540
Illegitimate	9	8	17
Total ...	303	254	557

There were thus 115 boys born to every 100 girls.

The following table shows the quarterly, and also the distribution, acording to locality:—

	EAST WARD			WEST WARD			BOROUGH		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
March quarter...	32	25	57	45	33	78	77	58	135
June ,, ...	26	28	54	46	38	84	72	66	138
Sept. ,, ...	27	27	54	47	40	87	74	67	141
Dec. ,, ...	37	26	63	42	40	82	79	66	145
1914 ...	122	106	228	180	151	331	302	257	559

The percentage of illegitimate births is 3. This is an unusually low figure.

The following table shows the number of births and deaths as well as the rates for a series of years :—

YEARLY BIRTH & DEATH RATES.

Year	No. of Deaths	Death Rate	Infant Mortality		Births	
			Total	Rate	No.	Rate
Aver. 1886-1890	377	22·8	154	240	642	35·0
Aver. 1891-1895	374	20·7	166	253	657	32·6
Aver. 1896-1900	386	19·1	140	213	659	32·6
Aver. 1901-1905	370	17·0	102	163	626	31·3
Aver. 1906-1910	339	16·8	87	147	590	29·3
1911	385	19.0	106	179	591	29·2
1912	288	14·2	58	96	603	29·7
1913	309	15·2	64	114	560	27·6
1914	385	18·9	105	188	557	27·4

It will be seen that the birth-rate is lower than any since 1909. The gradual decline since 1886 is apparent, with that exception, the lowest recorded is 1914.

STILL-BIRTHS.—I am indebted to the Registrar for the information that during 1914, 34 still-births were interred in the cemetery.

NOTIFICATION OF BIRTHS ACT.—During the year 539 births or 96 per cent. of the total were notified to the Medical Officer of Health.

DEATHS.

With regard to the other columns of the foregoing table I append the following definitions:—

The birth-rate and death-rate are calculated per 1,000 living of the population.

The crude death-rate is the rate per 1,000 living, of all the deaths registered in the Borough, including non-residents.

The nett death-rate is the true death-rate calculated on inhabitants of the Borough only.

The Infantile Mortality is the death-rate of infants under 1 year of age, calculated per 1,000 births.

The Zymotic death-rate is the rate per 1,000 living of deaths from the 7 principal Zymotic diseases:—Small-pox, Scarlet Fever, Diphtheria, Enteric Fever, Measles, Whooping Cough, and Diarrhœa.

The crude death-rate in 1914 was 17·6
The nett death-rate ,, ,, ,, 18·9

The corrected death-rate is obtained by multiplying the local recorded death rate by the standardising factor for the district. In Newcastle this is ·9887, and the death-rate becomes 18·6.

The purpose of a factor is to neutralise errors in death-rates caused by the disparity of age and sex distinction, and raises or lowers the local death-rate to what it would be if the age and sex distribution were the same as for England and Wales generally.

In 1914, 359 deaths were registered in the Borough. Of these 11 were of persons not belonging to Newcastle, leaving 348 deaths of inhabitants of the Borough.

To this number must be added 37 deaths of inhabitants dying outside the Borough, making a total of 385 deaths, and equal to a nett death-rate of 18·9.

The following table shows the quarterly distribution of the deaths.

	March	June	Sept.	Dec.	Total
No. of Deaths ...	105	109	73	98	385

The heaviest mortality was thus in the June Quarter. This was due to the outbreak of Measles.

The deaths were distributed as follows :—

	Males	Females	Total
East Ward	75	79	154
West Ward	93	67	160
Institutions	21	13	34
TOTAL ...	189	159	348

The remainder, 37, died outside the Borough.

The deaths in Institutions were as follows :

Union Infirmary.						Isolation Hospital.						Total Deaths in Institutions		
Residents			Non-Residents			Residents			Non-Residents					
Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females	Total
20	12	32	6	1	7	1	1	2	1	...	1	28	14	42

The death-rate of the Borough is a high one. The ages at death were as follows :

Under 1 Year	1—2 Yrs.	2—5	5—15	15—25	25—45	45—65	Over 65
105	26	26	18	13	51	48	98

The following table shows the principal causes of death in recent years :

	1909	1910	1911	1912	1913	1914
Respiratory Diseases ...	88	42	63	63	64	80
Heart Diseases	32	33	16	22	27	36
Zymotic Diseases	46	25	98	21	27	57
Phthsis	21	23	22	26	21	28
Other Tuberculous Diseases	2	5	12	10	11	5
Cancer	10	17	15	15	22	19
Senility	37	32	34	16	22	17
Birth Debility	11	8	33	27	27	42
Kidney Diseases	12	10	12	13	11	18
Others	96	85	80	75	77	81
Total ...	353	280	385	288	309	385

There is therefore a marked increase in the number of deaths from

1. Respiratory Diseases.
2. Zymotic Diseases.
3. Birth Debilty.

RESPIRATORY DISEASES.

These, as is usual, occupy the most prominent position in the mortality list of the Borough.

The quarterly distribution was :—

	March	June	Sept.	Dec.	Total
Deaths	28	23	11	18	80

The heaviest mortality was thus in the first quarter, a condition borne out year after year. This is due to the inclement months of the year, and deaths occur largely amongst the infants, and those well advanced in years. There is an exceptionally large number in the June quarter, but in this quarter also there was a large amount of Measles and Whooping Cough, with an increased mortality amongst infants. The increase in deaths from Respiratory diseases are probably due to the complications of, or sequels to these epidemic diseases. In comparison with previous years the death-rate from Respiratory diseases is as follows :—

Year	Average 1901—5	Average 1906—10	1911	1912	1913	1914
No. of deaths	76	69	63	63	64	80
Rate per 1,000	3·8	3·4	3·1	3·1	3·1	3·9
Per cent. of all deaths	21	20	16	22	20	20

The rate is thus a fairly constant one.

ZYMOTIC DISEASES.

The following table shows the deaths from the seven principal Zymotic diseases.

Deaths from Zymotic Diseases.

YEAR	Small Pox	Measles	Scarlet Fever	Diphtheria	Diarrhœa and Enteritis	Enteric Fever	Whooping Cough	Total	Rate per 1000
Aver. 1891—95 ...	...	11	5	2	15*	3	14	49	2·7
,, 1896—1900 ...	...	13	4	6	27*	3	5	59	2·9
,, 1901—05 ...	...	13	2	2	24	3	9	52	2·6
,, 1906—10 ...	...	11	1	2	24	2	5	45	2·2
1911	...	17	3	7	55	2	13	97	4·8
1912	...	3	1	1	11	2	3	21	1·03
1913	...		...	4	19	2	2	27	1·3
1914	...	24	1	3	23	1	5	57	2·8

* Not including Enteritis. After 1901, Enteritis deaths are added to deaths from Diarrhœa—at all ages.

As shown above the increase is mainly due to measles, which was prevalent in the early part of the year.

Deaths from Birth Debility are dealt with under Section G.

INQUESTS.

18 Inquests were held during the year, 13 being on male persons and 5 on females.

Vital Statistics of Whole District during 1914 and previous Years.

YEAR	Population estimated to Middle of each year.	Births.			Total Deaths registered in the District.		Transferable Deaths		Nett Deaths belonging to the District.			
		Uncorrected Number	Nett				of Non-residents registered in the District.	of Residents not registered in the District.	Under 1 year of age.		At all ages.	
			Number	Rate	Number	Rate			Number	Rate per 1000 nett Births	Number	Rate
1909	20,152	579	579	28·7	364	18·6	25	14	81	145	353	17·5
1910	20,180	545	545	27	280	13·8	10	10	50	97	280	13·8
1911	20,208	591	591	29·2	385	19·0	10	10	106	179	385	19·0
1912	20,236	604	603	29·7	278	13·7	14	24	58	96	288	14·2
1913	20,270	564	560	27·6	292	14·4	16	33	64	114	309	15·2
1914	20,301	559	557	27·4	359	17·6	11	37	105	188	385	18·9

Area of District in Acres (land and inland water) 671.
Total population at at ages 20,201, at Census 1911.

Infantile Mortality.

CAUSES OF DEATH.	Under 1 Week	1—2 Weeks	2—3 Weeks	3—4 Weeks	Total under 4 weeks	4 Weeks and under 3 Months	3 Months and under 6 Months	6 Months and under 9 Months	9 Months and under 12 Months.	Total Deaths under 1 year.
Measles	0	0	0	0	0	1	0	4	6	11
Whooping Cough	0	0	0	0	0	0	0	0	1	1
Other Tuberculous Diseases ...	0	0	0	0	0	0	1	0	0	1
Meningitis	0	0	0	0	0	0	0	1	0	1
Convulsions	0	0	0	0	0	2	2	1	0	5
Bronchitis	0	0	0	0	0	3	0	4	1	8
Pneumonia (all forms)	0	0	1	0	1	4	1	7	4	17
Diarrhœa	0	0	0	0	0	5	4	0	4	13
Suffocation overlying	0	1	0	0	1	1	0	1	0	3
Congenital Malformation	2	0	0	0	2	0	0	0	0	2
Premature Birth	10	3	0	0	13	2	1	0	0	16
Atrophy, Debility and Marasmus ...	6	1	2	2	11	6	4	1	1	23
Other Causes	0	1	0	0	1	2	0	1	0	4
Totals	18	6	3	2	29	26	13	20	17	105

Nett Births in the year { Legitimate 540. Illegitimate 17.

Nett Deaths in the Year { Legitimate 97. Illegitimate 8.

Causes of, and Ages at Death during the year 1914.

CAUSES OF DEATH.	Nett Deaths at the subjoined Ages of "Residents" whether occurring within or without the District.									Total deaths whether of Residents or Non-Residents in Institutions in the District.
	At all Ages	Under 1	1 and under 2	2 and under 5	5 and under 15	15 and under 25	25 and under 45	45 and under 65	65 and upwards	
Enteric Fever...	1	0	0	0	0	0	1	0	0	0
Measles	24	11	7	5	1	0	0	0	0	0
Scarlet Fever	1	0	0	1	0	0	0	0	0	0
Whooping Cough	5	1	3	1	0	0	0	0	0	0
Diphtheria and Croup	3	0	0	1	2	0	0	0	0	3
Influenza	3	0	0	0	0	0	0	1	2	0
Erysipelas	1	0	0	0	0	0	1	0	0	0
Phthisis (Pulmonary Tuberculosis)...	28	0	0	0	3	2	19	3	1	7
Tuberculous Meningitis	2	0	0	0	1	0	0	0	1	0
Other Tuberculous Diseases ...	3	1	0	1	0	0	1	0	0	1
Cancer, malignant disease	19	0	0	0	1	0	3	6	9	3
Rheumatic Fever	1	0	0	0	0	0	1	0	0	0
Meningitis	4	1	0	2	1	0	0	0	0	0
Organic Heart Disease	36	0	0	0	2	1	1	12	20	7
Bronchitis	25	8	0	1	0	0	1	0	15	3
Pneumonia	49	17	7	8	2	1	5	4	5	2
Other diseases of respiratory organs	6	0	1	1	0	1	0	2	1	0
Diarrhœa and Enteritis	23	13	5	0	0	0	0	1	4	1
Cirrhosis of Liver	5	0	0	0	0	0	2	2	1	1
Nephritis and Bright's Disease ...	18	0	0	1	0	2	5	5	5	1
Puerperal Fever	2	0	0	0	0	2	0	0	0	1
Other Accidents and Diseases of Pregnancy and Parturition...	1	0	0	0	0	0	1	0	0	0
Congenital Debility and Malformation including Premature Birth ...	42	41	0	1	0	0	0	0	0	0
Violent Deaths excluding Suicide ...	14	4	1	1	2	0	4	1	1	0
Suicide	2	0	0	0	0	1	0	0	1	0
Other Defined Diseases	67	8	2	2	3	3	6	11	32	12
Totals	385	105	26	26	18	13	51	48	98	42